

Basic Color

Prepared exclusively for students of
ART INSTRUCTION SCHOOLS

CONTRIBUTORS

George Carter
Raymond Dowsett
Gerald Hjelm
Gerald Lee Nees
Austra Ogulis
Claremont Pritchard
Pat Rosado
Donald Teague
George Terp
James A. Walker

In this lesson you will learn the basic rules of color and you will see how they apply to all media. Color, you will see, is virtually a key, and with this key, door after door will be opened into new fields of artistic satisfaction and success.

Color is important to everyone, artists and non-artists alike. The proper use of color can make any small wardrobe tasteful or any inexpensive apartment elegant. To an artist, however, color means that and more. To an artist, color is the cornerstone of a career. In this lesson, you will see how various colors affect other colors and how certain colors even affect the actions of human beings. You will learn how to focus attention with colors and how to determine what types of color schemes are best for particular moods and subjects. In these and many other ways, the world of color will be open to you.

You have already been briefly introduced to color in the colored pencil section. Although that was early in the course, you were able to work with color immediately in order to let you see and feel its brilliant power. The colored pencil section gave you a practical, working introduction to color.

Now, after several lessons, you have enough artistic experience to explore deeper into the world of color. Here you will learn the basic rules of color and you will see how they apply to all media. Color, you will see, is virtually a key, and with this key, door after door will be opened into new fields of artistic satisfaction and success.



Design by George Carter.

Basic Color

"Give it life, give it color!" That's a slogan poster artists learn the very first day. For that matter, every artist soon discovers how important color is to make a picture exciting and appealing. Color is such a strong, enriching part of human vision that it is used all the time by artists and non-artists alike. Clothes, cars, houses — posters, illustrations, nature paintings, all take on new life with color.

The design on this page is an excellent example of color use in commercial art. The artist who created it for the Bureau of Engraving's calendar, not only has an understanding of placement of forms and shapes, but also a good knowledge of color. In this design he has combined the commercial and graphic art tools to symbolize the variety of work that is done at the Bureau. And it is his skillful use of color that helps to organize and make the tools eye-catching and effective.

As you continue to study, you will become more aware of color in art (as in this design) and also in your daily living. Your new knowledge will help you to decorate your room and home with more understanding and confidence. You



Fashion art by Pat Rosado.

know, color can be used to make a room appear larger or smaller. And shopping for that "new outfit" will also be more exciting for you will see interesting color combinations — new color relationships that you once over-looked. Modern manufacturers realize the impact that color has upon their customers. In fact, almost all items now come in many colors. Even things that originally came only in black or white (telephones, cars, kitchen appliances and bathroom fixtures) are now available in all the colors of the rainbow.

And as an artist you will have your own personal rainbow at your fingertips. Whether it be a rainbow of paint or colored pencils, your tools will be useful to you if you learn a few basic rules. The rules will apply to all of the mediums, and surprisingly enough, they are not very complicated. Because learning about color isn't very difficult for artistically talented people (using color comes naturally to them), I'm sure that with a little practice you'll do well with this subject. At first, however, when you are reading about color rules, it may all seem a bit complex. This probably will be because you have been picking colors by instinct — guessing at colors. And that's the natural way to begin, but professional artists need to have more control over their work. They cannot choose colors just because they like them or merely because they suit their moods — the colors must also suit their subjects. Personal preferences may be adequate for dressing or for choosing an appliance, but you will need to know some of the specific characteristics of color once you begin working with it.

This control and knowledge will come to you too, with a little training and experience. And, your training will bring you an extra, unexpected bonus! The world around you will change, or seem to.

It will become twice as beautiful! Slowly but steadily, you will begin to develop a sharper sense and awareness of color. Eventually sensations which you thought of merely as "drab" or colorless will become rich and vivid. Even grays will become colorful. There will no longer be any neutral grays, but hundreds of varied and subtle shades of gray. This increased awareness of beauty and color in your surroundings will also show up in your pictures.

In the process of becoming a master colorist you will become familiar with the emotional impact of various colors on your audience. You will learn how to mix colors, you will learn about the effect that colors have on each other and you will add some new words to your artistic vocabulary. It's part of becoming an artist.

The artist represented on this page has also studied color and its uses. And he has found that the basis for good color work is careful drawing. Color can do many things: it can make a picture flashier, it can make a picture more exciting and livelier, but it *cannot* cover or gloss over an unsuccessful drawing. And for this reason, you will have to be especially careful when you work with color. For it's easy to get so involved with the colors that you neglect drawing the objects in your picture carefully. It's easy to do, but it's also very dangerous. You will soon learn that sloppy drawings cannot be improved merely by adding color.

Once you have learned to control your color — to be a color master, you too will be able to do successful pictures and illustrations with effective color schemes. You will learn to mix and match and to select proper colors for the subjects you will be rendering. Being able to do this will bring you closer to your goal in the art world.

The Color Wheel

The color wheel is especially helpful to the artist when he is mixing colors. By locating a specific color (hue) on the wheel, he can see what colors make up the mixture he wants. The wheel on this page was created by mixing red, yellow and blue tempera.

The paint brushes on the wheel indicate the *primary colors*: red, yellow and blue. All colors originate from these primaries.

By mixing equal amounts of two primaries, you can get a *secondary color*. For instance, glance at the color wheel. Find the mid-point between red and yellow. This color is orange, formed by mixing equal amounts of red and yellow. Orange, green and violet

are the three secondary colors.

When you mix one primary with one of the secondary colors next to it, you create a *tertiary color*. There are six tertiary colors, two for each primary: red-orange, red-violet, blue-violet, blue-green, yellow-green and yellow-orange.

Colors directly opposite on the color wheel are called *complementary colors*. For instance, red and green are complements as are yellow and violet, blue and orange, and so on.

The *analogous colors* are very similar and next to each other on the wheel. Yellow, yellow-orange and orange, for example, are analogous colors. Blue, blue-green, and green are also analogous.

Color Wheel by Raymond Dowsett.



Mixing Colors

You may be wondering how the colors on the color wheel were mixed. But once you begin experimenting with color you will soon be able to see what colors make up a particular mixture. The artist who mixed the colors on this page used only yellow, red and blue plus black and white. He has purposely left some of the pure color showing so you can see just what went into each combination. Once you can see this relationship you will be able to tell what you will need to create any color you see.

Pay special attention to the variations of each color. The artist mixed equal amounts of two primaries to create the secondary,

but if he had wanted to mix a tertiary (blue-green, yellow-orange, etc.) he would have added a little more of one primary than the other.

Once you learn the basic rules and possibilities of mixing, they will be easily applied to all other different types of paints, crayons, pastels and pencils. The effects will be slightly different. For example, you will find that tempera has a different appearance than oil paints, transparent water colors, and so forth. But the rules for mixing will remain the same. You will still have to blend two primaries to get a secondary and a primary and secondary to get a tertiary.

This illustrates how easily orange (a secondary color) can be mixed by using equal proportions of yellow and red. The more yellow in the mixture the lighter and more yellowish the orange becomes. If there is enough yellow the orange becomes quite gold.

By mixing equal amounts of yellow and blue the artist has formed the secondary color green. Notice how the green appears slightly more yellowish as it blends into the yellow. Near the blue, where there is less yellow, the green takes on a blue cast.

By blending equal amounts of red and blue, the artist has created the secondary color, violet (purple). The mixtures on this page have all been blended with tempera paint just like your own.

Here the artist has created a tint (or a light value of a color) by adding white. Notice how the white mixes with the red and forms "pink". By adding white you will be able to make tints of any color.

Here the artist has mixed red with green (above) and with black (below). When he added green (red's complement) the red lost its intensity and some of its "color." Below the artist has added black. When you do this, the red does not lose its "color" but simply becomes a darker red.

To make a shade, or a darker tone of a color you can also add a little black. Notice how the green gets darker.

Color Schemes

Color will not only make your pictures more lively, but can also tie the composition together. Color schemes that have a major color unify the objects and make pictures more interesting.

Color also creates mood. If you choose colors that fit your subject matter, your picture will have a special "feeling" or mood. As an artist you have the right to take "liberties" to improve your pictures. Your job is to interpret nature — not to be its slave. You should choose those colors that add to the mood of your pictures.

Painting by Gerald Lee Nees.



This scene captures the mild, warm quality of an early fall day. The artist has intensified the warm sunny look by using a very warm color scheme — one that accents red and yellow tones. The artist who did this painting is almost completely paralyzed and paints by holding his brush in his mouth.

Painting by Austra Ogulis.



This picture has a color scheme that uses all of the primary colors (red, yellow and blue). Notice how effectively the artist has used the bright red areas for accent in the picture. Because it has three basic colors, this color scheme is called a triad. It is also called a complementary color scheme because the artist has used complements of these colors (colors opposite each other on the color wheel).

For instance, if you are painting a warm landscape or a summer scene, your color scheme should be quite different from a winter landscape or a seascape. The colors in the red and yellow range of the color wheel seem warmer than the colors in the blue section. For this reason you will want to use more warm colors in a summer scene than in one depicting winter. These temperature impressions come from our associations with real objects: yellow is the color of the sun, red is the color of fire, blue is the color of water and ice. And since we have learned that certain temperatures and colors go together, we link the two characteristics.

Western scene by Donald Teague.



This western scene has a cool color scheme. The tones (all blue) give a feeling of darkness and loneliness. The mystery of the picture is created by the artist's effective use of cool colors.

Both the fall scene and the western scene are created with analogous color schemes (colors that appear near each other on the color wheel). The fall scene has hues that range from yellow to red, and the western scene is painted in blues and greens.

Art by Joyce Lair.

This illustration is basically monochromatic (one color) with shades and tints of red. The artist used a range of values to show the interest you can get with mostly one color.

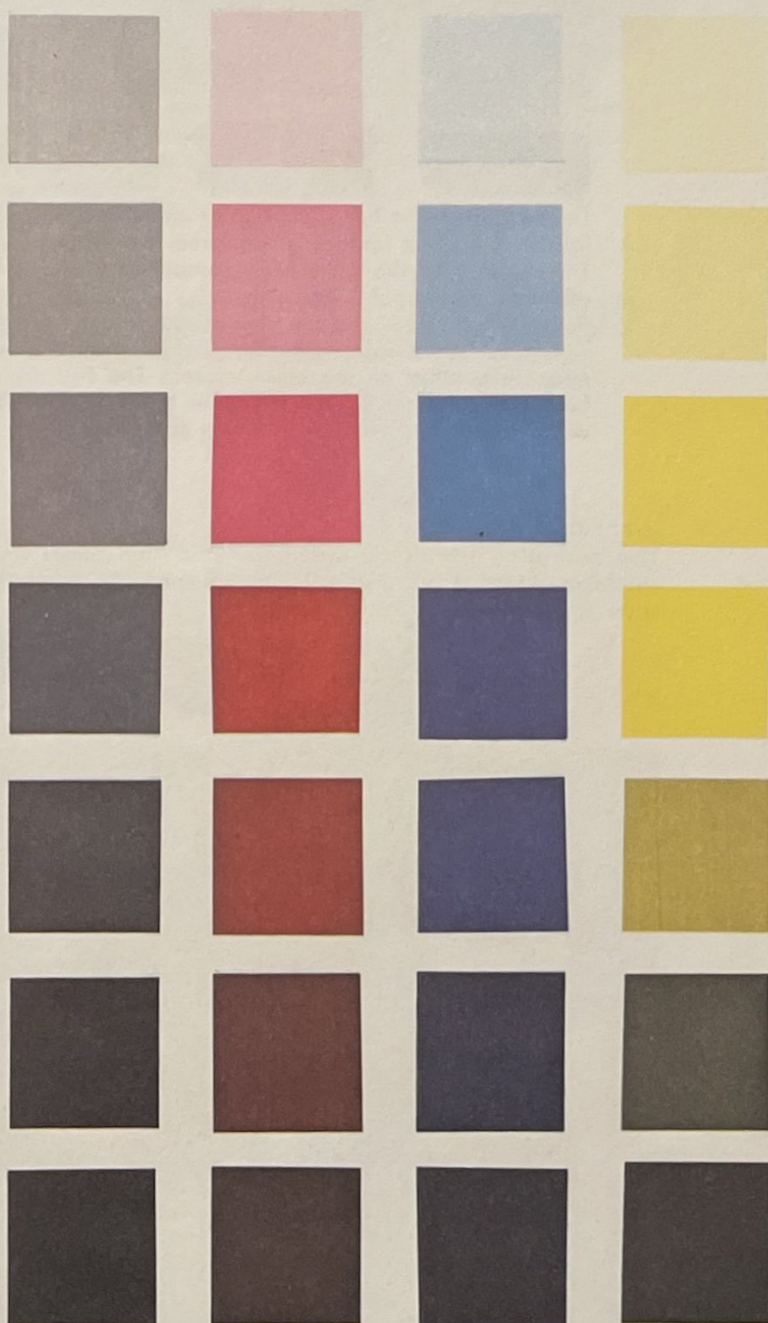


Value Scale

If you were to take a black and white photograph of a colorful fall scene, the picture would consist of many different gray tones. These grays would indicate the values or darkness of the colors. Every color, in addition to having its own particular "hue" also has a value (darkness or lightness).

When you are mixing your own colors you will be able to change the values by adding either white or black. If you add white, you create a tint of the original color, and if you add black you form a shade. The value chart below is composed of a series of tints and shades of the primary colors and gray. The artist has placed the gray tones on the left hand side so you will be able to see the values of the colors (the gray they would photograph in black and white).

The colors at the top of the chart (the tints) are called the high key colors. By combining various keys you will be able to add new interest and depth to your pictures. For example, the foreground in a landscape could be painted in a middle to low key while the background would more likely be painted in a high key (dark objects seem to get lighter as they go into the distance). No doubt you will want to experiment with pictures that use all three keys, or two different keys, as well as the pictures that have only one key.



This clown has been rendered with a middle key color combination. The artist has used only the pure primaries and a middle gray. By using the pure colors the artist has created a very "flashy" color combination — one that could be effective in advertising or poster art.

Value Scale and Clowns by Raymond Dowsett.



Here the artist has used tints or a high key color scheme. Notice how he has used a variety of gray and color values. Check the value chart and locate these tints.

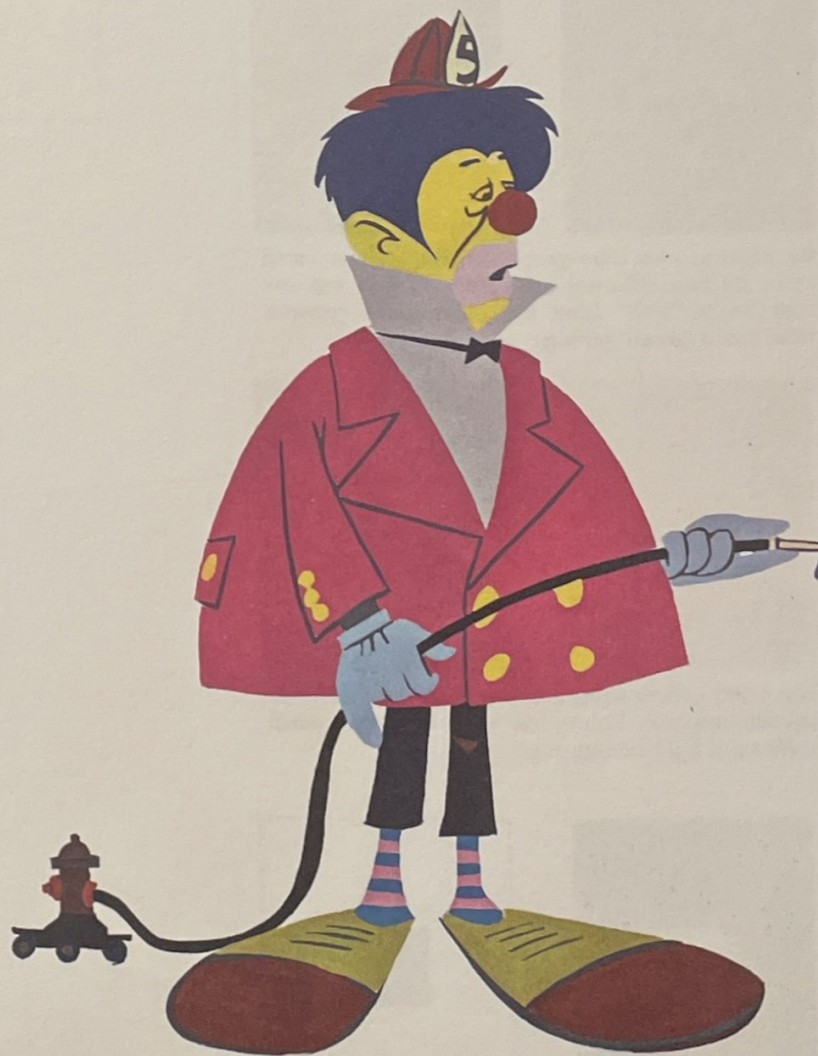
The dark shades (low key color) of this clown vary from almost pure hues to dark black-grays. Here again the artist has used only the colors you will be able to find on the color scale.



Using the Keys

Some art projects just “beg” for color! Who can imagine Christmas without the traditional red and green hues? Or, what would decorations for a Halloween party be without combinations of orange and black? The Fourth of July seems to say “red, white and blue,” just as an announcement for a new baby calls for pinks and blues. And clowns! The excitement of a parade or a circus — here is another subject that just isn’t complete without color. On these two pages the artist has caught the gaiety of Mr. Clown in four different color combinations. Each is different, yet each adds “life” and spirit to this familiar personality.

You can quickly spot the clown done in the high key colors as contrasted with the one rendered in the low key colors. The first is light and bright while the last, the low key rendering, is darker and more intense. One figure is done entirely in a middle key zone with all primary colors and middle gray. And, the last is a collection of all the color keys. There is some advantage to mixing the values and tints all together, though there are also times you will want one main key to dominate. But that’s the beautiful part of using color. It gives you so much room to experiment. Your temperas are just right for such adventures. They are thick enough so you can easily paint over any area you want to change. They also have enough body for you to blend almost any color imaginable.



This clown, rendered with a combination of keys, is especially effective. Notice the greater variety of values the artist has given this drawing. By adding these different values, you can make your pictures effective and interesting.

Effects of Color on Color

When colors are seen together they affect each other or seem to change each other. Once you begin to combine colors you will notice that they will not always appear the same in your pictures as they do on a piece of white paper. Also, a color on white paper will look different from the same color on black paper. Similarly, a light blue surrounded by orange will not look like the same light blue when it is surrounded by violet. Test this with your own colors. It is an unavoidable effect. For example, when you put an area of gray on white paper, it may look too dark to you. This is because it is against a white background. However, after you have applied other colors around the gray, the gray looks lighter than when it was surrounded just by the white.

To show you the effects that color have on each other, we have



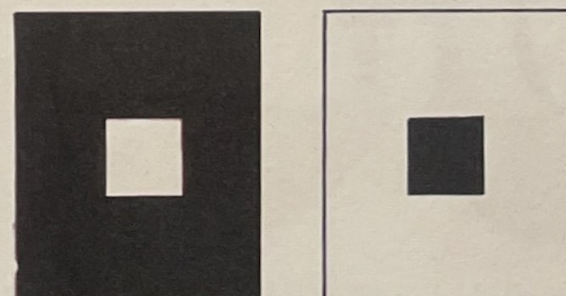
This set of orange squares shows the effect you can achieve by placing the same color on backgrounds of different values. When the orange square is on a dark orange background it seems lighter than when it is on a lighter background.



By placing two blue-green squares of the same color on two different backgrounds, you can see that on a "true" blue the color looks greener than on a green setting.



The small yellow square in the center of the large square appears lighter on a dark background than on a light background.

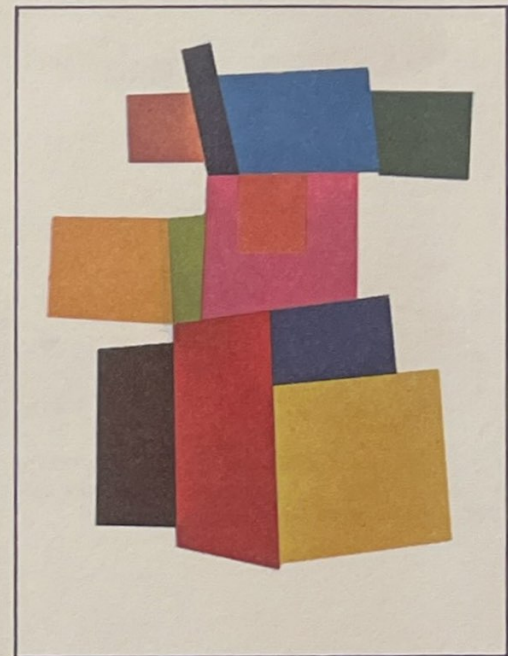


Notice how the little white square appears larger than the black one. Even though the two squares are the same size, light colored squares on a dark background have a tendency to appear larger than dark ones on light backgrounds.

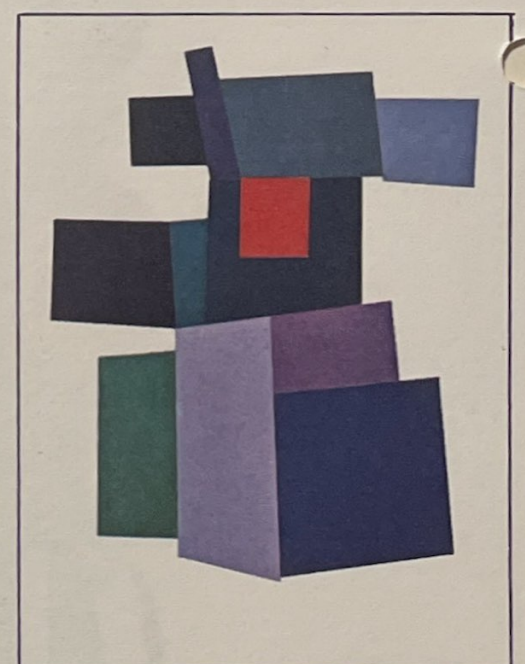
presented some of the simple contrasts that you will be working with. Immediately, you will become aware of certain effects that never change. First, a strong color is not affected as much by an adjoining color as a weak color is. Pure red, for instance, will always look decidedly red, no matter what you put next to it. However, light pink can be made to look warmer or cooler, lighter or darker, depending upon the colors next to it.

The next thing to remember is that colors tend to look lighter next to black and darker next to white. Similarly, colors tend to look brighter next to darker colors and darker next to lighter colors. Colors sometimes have an enlarging or diminishing effect on one another. The white square on the black background looks much larger than the black square on the white background. You can prepare some of your own "optical illusions" like this for fun as well as for a chance to study the effects of color together.

Designs by George Terp.



This design has an overall color pattern with no focal point or dominant area. This decorative flat style could be used effectively with poster work and in advertising.



Here the artist has made the orange area dominant. It is the focal point because it is so different from the rest of the areas (analogous blue-purple colors). The blue colors have a wide range of values, but the orange stands out because it is the complementary color.

COLOR PRACTICE

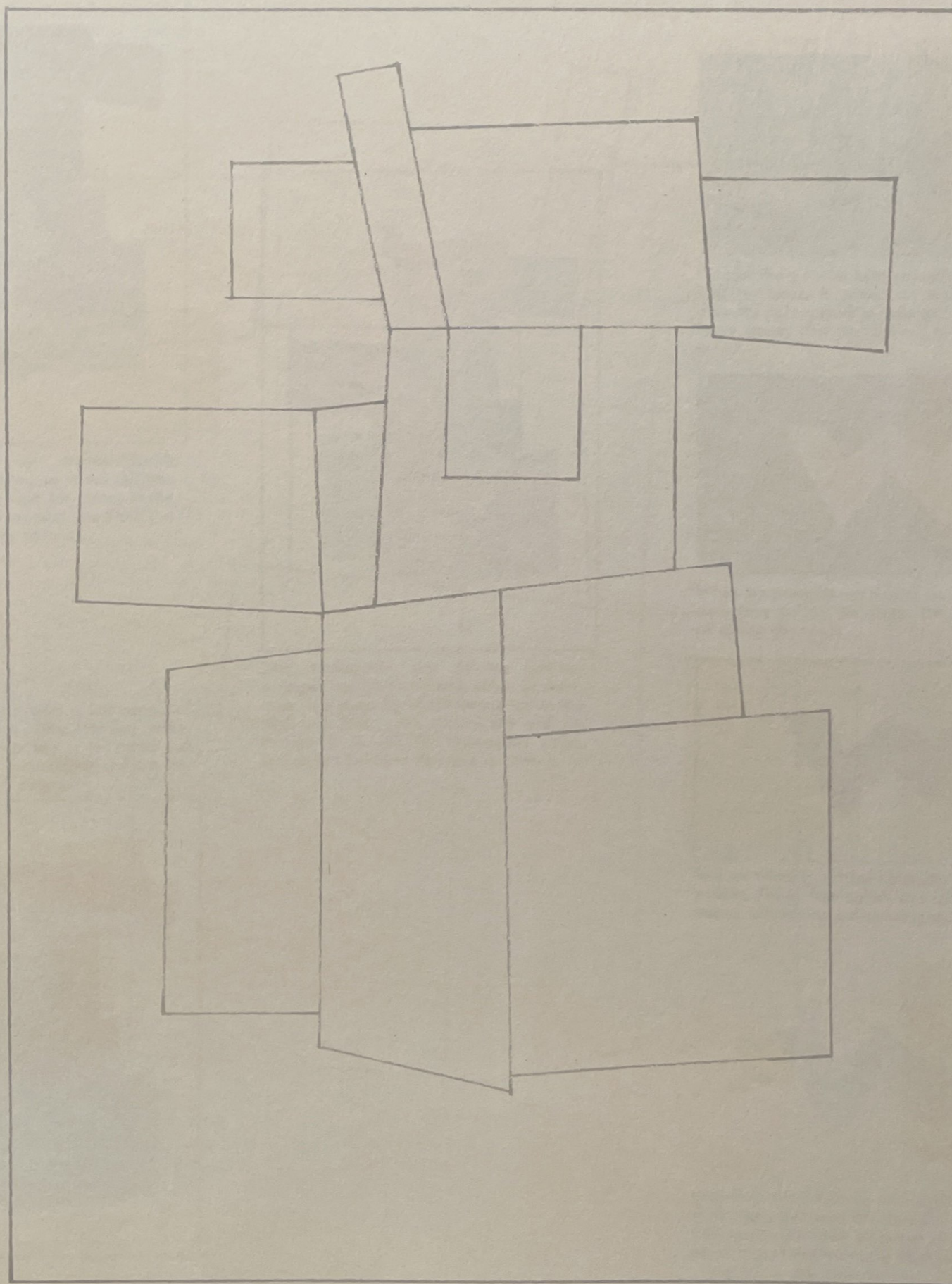
WHAT TO DO

We have given you two outlines of the design you have already studied. These practice designs have been reproduced the same size that the artist did his original art. On this first page, choose one of the artist's color combinations and reproduce it here. Then, on the back of this practice page, try one of your own color schemes. See if you can make one area the focal point. Remember to use contrast and variety.

When you begin to mix your colors, be sure the tempera is stirred and has an even consistency. If it seems a little too thick (it should be the consistency of thick cream) add a drop or two of

water and mix it well. Take a cup or saucer and scoop a little of the tempera into it (you can use a clean table knife to scoop with). Then, with the knife completely clean, take a little more paint out of another jar and mix the two colors with the handle of your brush.

Before you start actually painting your design, make a few tracings of this design for practice. Try to get your blended paint smooth and your strokes even in thickness. Get familiar with your medium, and then, after you have mixed enough paint for each area on the practice pages, you are ready to begin. Be sure to mix a little more paint than you think is necessary because it's difficult to match once you run out of a mixture.



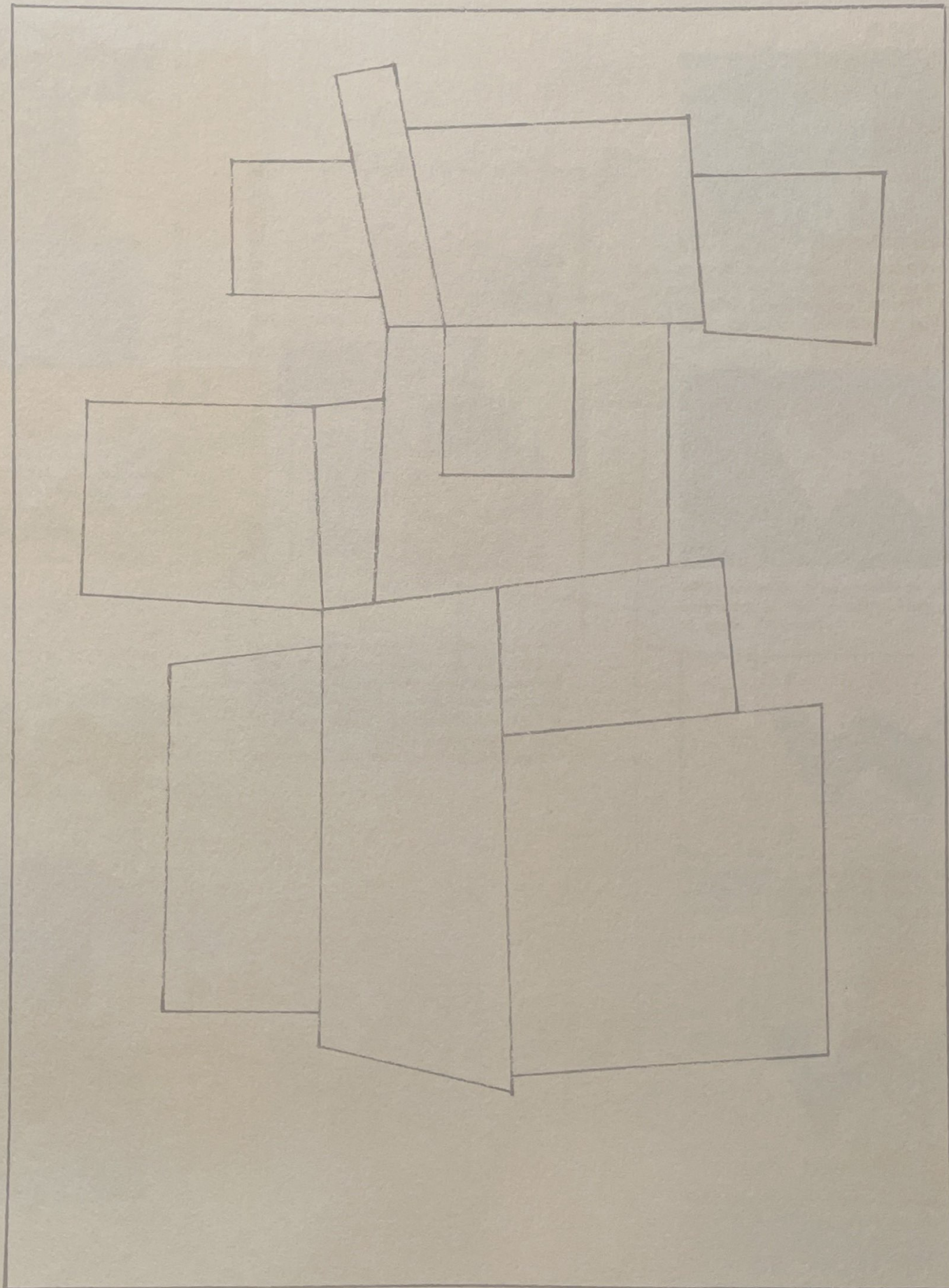
This practice sheet should be sent to the school. It will show us some of your practice work and will help determine your grade. Your instructor will study these drawings before he evaluates your lesson assignment work.

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____



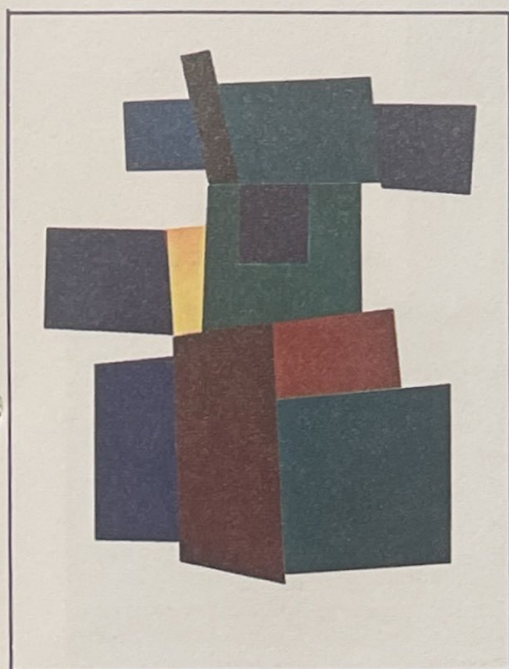
Focal Points

When you start putting your "color knowledge" to work, you will see many possibilities and effects for your own pictures. For instance, you already have read about color changes that occur when one hue is placed next to another; color schemes with a main color that "tie" picture parts together; and the different keys that are used in color work. On this page, the artist has put all of these things together in creating these designs.

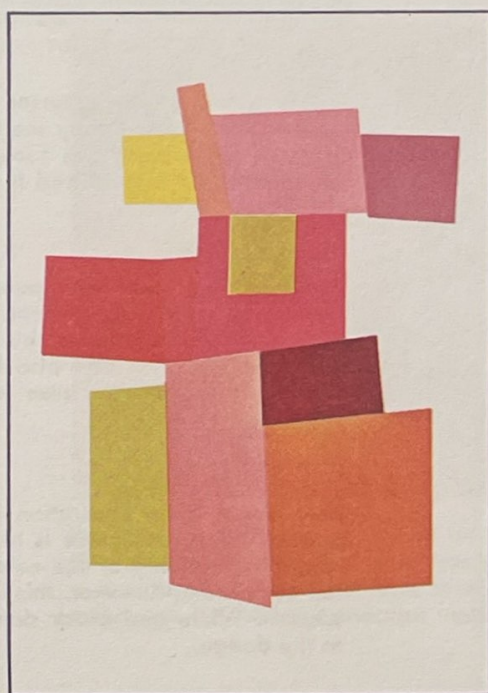
The artist has created a number of different focal points and moods by using different schemes and values. Notice how different each design seems because of the changes in color. In some

of these designs the most obvious or dominant area is a small one and in others it is a large one. This is possible because the artist has used contrast. For example, when he used a great many low key colors (dark) he painted a small high key area (light) for contrast. This light area became the focal point because it is so different from the rest.

A color does not necessarily have to be a brilliant one to be the focal point . . . it is more important that it is a different color or value. In other words, in a middle key color scheme where all the colors are bright, a high key area could very well be the most obvious spot or the focal point . . . not because it is bright, but because it is different from the rest of the picture.

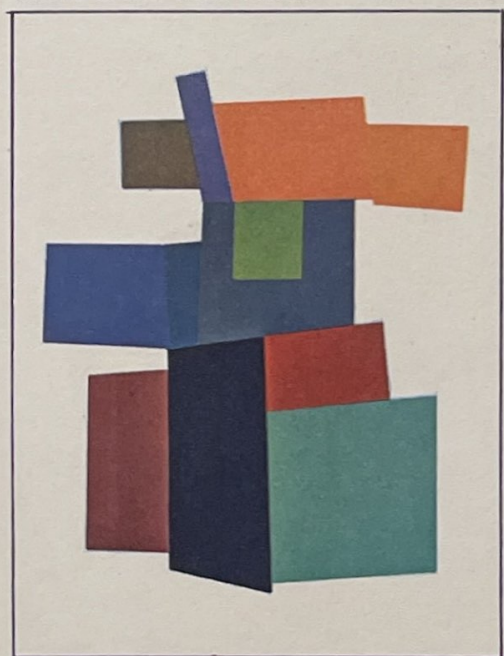


Here is a low key color scheme (dark). The yellow accent seems to stand out because it is the only high key color in the design. Squint your eyes and you'll see the tan focal point is very obvious.



This analogous color scheme (yellow-orange) has basically one value or darkness. The majority of the areas are in the high key (tints). The middle key red, although it is still an analogous color, stands out because its value is darker.

This high key design with a full range of color is accented by the low key blue. The dark blue area seems to stand out because its value is so different from the values of the other colors.



One of the poorest color combinations, as far as visibility goes, is green on red. These complementary colors tend to "vibrate" if they have the same value, and are difficult to read when combined.



White on green is not nearly as effective as black on yellow or red on white. They cannot be seen at great distances.



Red on white is almost as easily seen as black on yellow. These two colors are often combined by poster artists and advertising men.



Highway departments use yellow and black for their signs because black lettering or designs on yellow can be seen at great distances. So if you need high visibility on a sign or poster, consider using black on yellow.

Art work by Gerald Hjelm.



The placid atmosphere of this village is suggested by an evenly balanced color scheme. Although there is a full range of hues, they are parceled out equally. Both warm and cool accents, and dark and light areas are thoughtfully arranged.



Art by Claremont Pritchard.

In this study the artist reverses the concept illustrated in the village setting. Here you can immediately see the bright color accents . . . the strong value contrast. To balance this focal point, considerable detail is used on the leaves and, the second bird is shown in an expressive action pose.

A sports illustration with punch! This is a picture done basically in an analogous color arrangement. With the exception of a few blue touches, and several white accents, this is painted in analogous red hues. Because of this, the illustration can also be classified as having a "saturated" color scheme. It proves that even with a limited pallet you can get impressive results.

Here again is an illustration in a limited number of colors. Speaking in general terms, this piece is also a saturated or analogous color arrangement. The majority of the colors are yellow and yellow-orange. Like most full color work, however, this illustration does not stick to one "pure" color scheme. White and black details were added to give more visual impact to the design.

Art work by Barbara Schwinn.



Illustration by James A. Walker.

The Psychology of Color

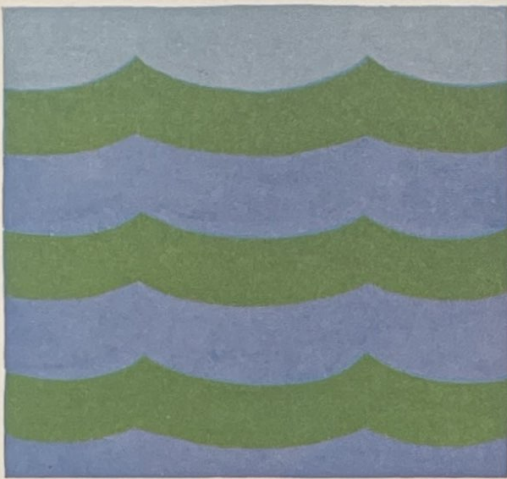
Working with color can be fun and exciting. No doubt you have already noticed the variety you'll be able to get by experimenting with only one or two colors. And by now you probably realize that some hues seem to change when they are placed next to one another. Yet even though a color may seem different in some surroundings, it still radiates excitement and its unique characteristics.

Some colors actually convey their own special "messages" that are understood by people. The psychology of color, or the study of people's reactions to it, has been known for years, yet it is especially important today because of the extensive use of color. Color is everywhere: in advertising art, in offices, homes and schools. And

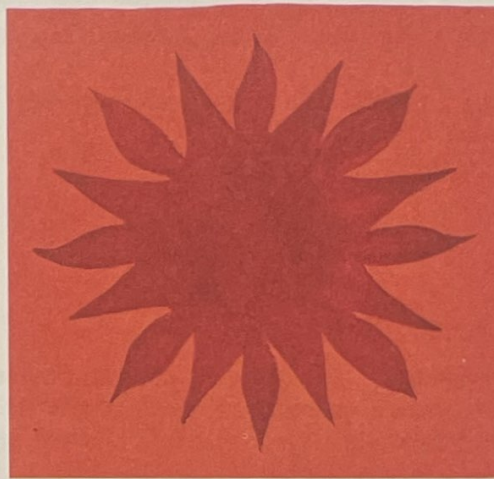
because it is found in working places, the people in industry have been investigating the effects color has on work. They have found that light green surroundings are restful and easy to work in. Light colors also make small rooms seem brighter and larger.

Colors also can bring certain emotions to our minds. Red reminds us of heat, rage and passion; yellow makes us think of sun, cowardice and life while blue reminds us of water, coolness and sky. By using these colors to your advantage, you can make your pictures more effective and appropriate. These colors will be able to help you tell a story. Below we have illustrated some of the moods and effects you can create with color combinations.

Designs by Raymond Dowsett.



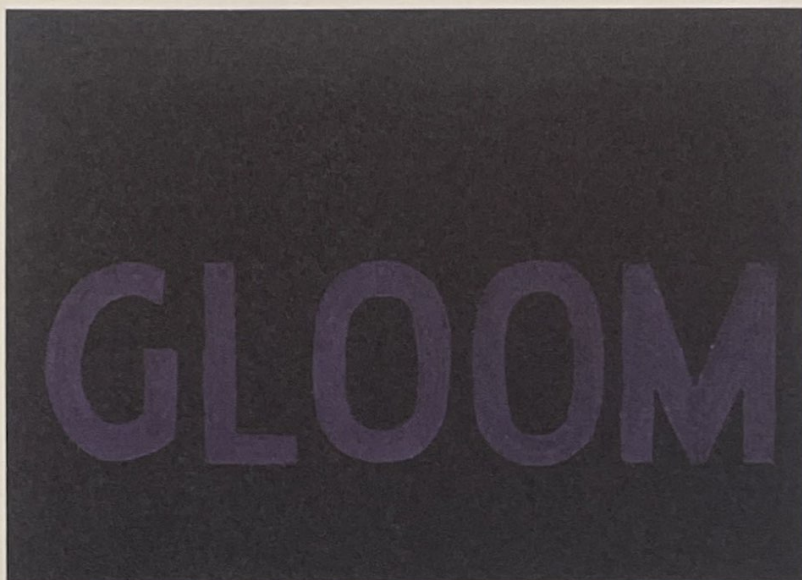
Blues and greens are cool colors. They remind us of water or ice. By incorporating colors like these into your posters and illustrations you will be able to create moods by your use of color as well as subject matter.



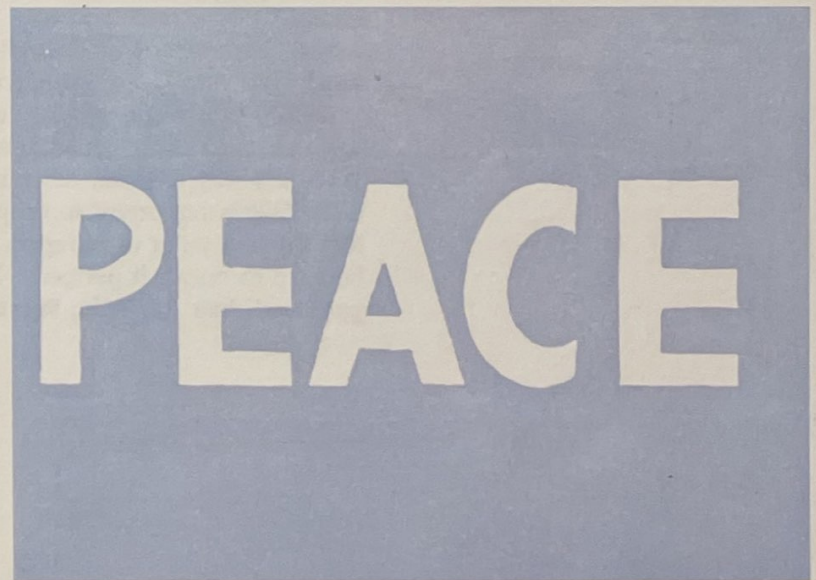
Red and orange seem to remind us of heat (fire is reddish). Here the artist has painted a sun to show you how well these warm colors can be used to symbolize heat.



This color vibration is caused by three colors of similar values. Squint your eyes a little, and notice the "movement". Effects like this can be useful in advertising art because they seem to "stand out".



Black gives the impression of sorrow, gloom and death. The purple can also symbolize sorrow and mystery. All dark colors tend to create a mood of mystery and suspense while light colors are happier and more cheerful.



Here the artist has combined a cool blue with white to give the impression of "peace". White symbolizes purity and sincerity. Notice the cool, airy, sky-like quality.

Checking up on Yourself

Do You Remember That:

1. All colors originate from the primaries. To get various tints and shades of the mixtures you add black or white.
2. Bad drawing cannot be hidden by the addition of color.
3. Contrast is an important part of color work: it creates interest and focal points.
4. Colors tend to change when they are placed next to one another.
5. High key is light, low key is dark, and middle key is color without the addition of black or white.
6. Colors tend to get lighter and grayer when seen at a distance.
7. Vibrating colors are hard to look at and can be corrected by changing the value of one of the colors.
8. A picture with a saturated or analogous scheme needs some accents to give it visual impact.

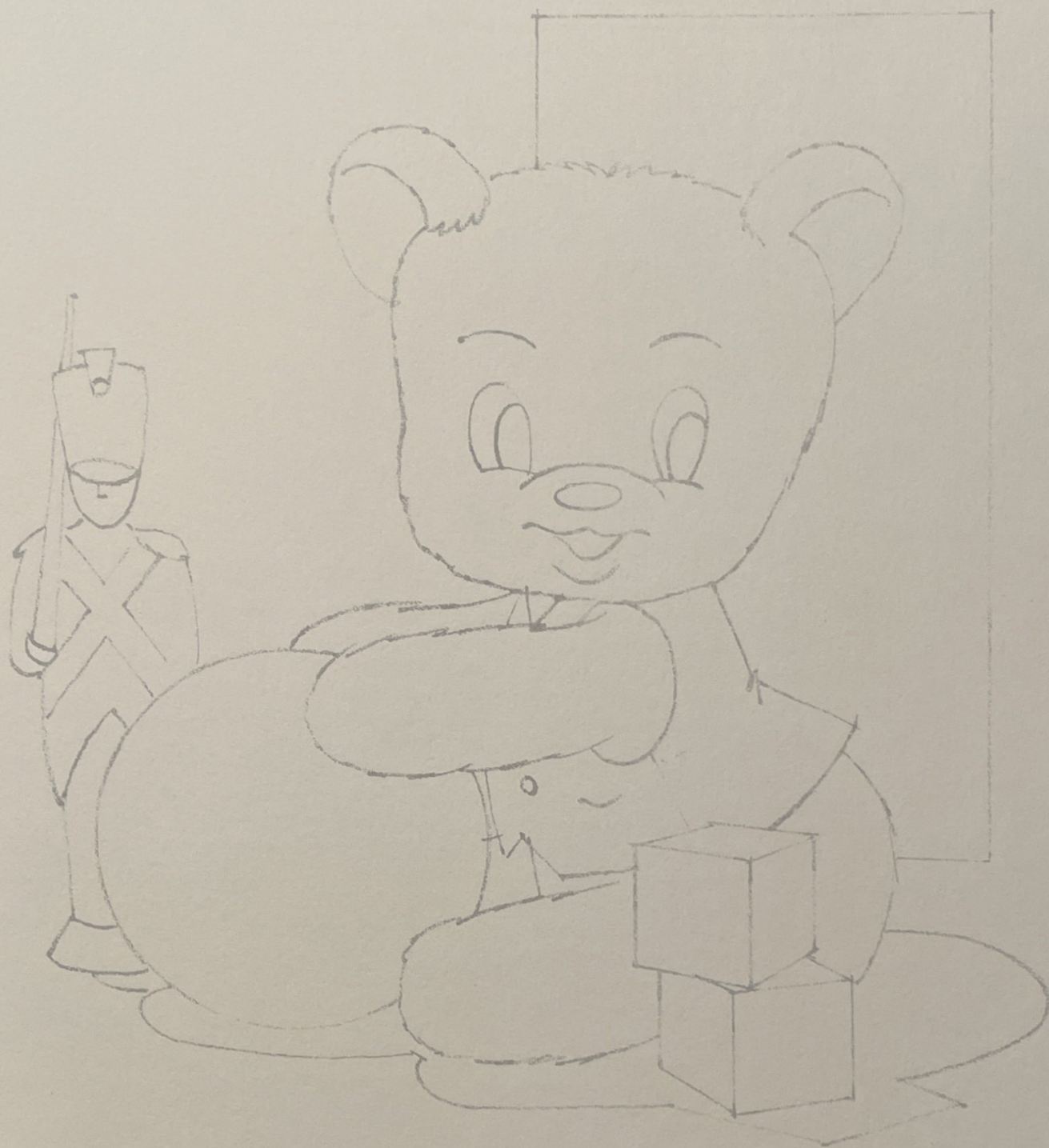
Did You:

1. Try some extra color schemes of your own?
2. Wash your brush before you started painting with a new color?
3. Do your practice work?
4. Look for color illustrations in magazines and books? If so, were you able to find some of the different color schemes we discussed?
5. Find it easier to work with only analogous colors or an unlimited number of hues?

BASIC COLOR LESSON

For the color assignment, we have given you two outlines of some toys. Using your tempera paints, you are to render the toys with only the following five colors: yellow, green, one tint of blue, one tint of violet (for a tint you add white), and one shade of red (for a shade you add black). If you are not sure how to mix a tint or a shade, review the section on mixing color on page four. Limiting yourself to only these five colors, you are to develop an interesting color pattern. Use one of the outlines for practice and one for your finished work. Send the "finished" drawing to the school for correction and grading. A good part of your grade will be determined by how well you mix your colors, apply your paint, and follow directions. For example, if you use orange, pink, or any other color not listed, your grade will be lowered.

Before you begin mixing, be sure your paints are stirred and have an even color consistency. Then, scoop a little paint out of your jars with a clean table knife. Mix each color in a separate dish. This is important to keep your colors from running together. Mix enough paint to cover an area, because if you run out, it will be hard to match it perfectly. It's better to have a little more than you need than too little. Work slowly and carefully. Have fun!



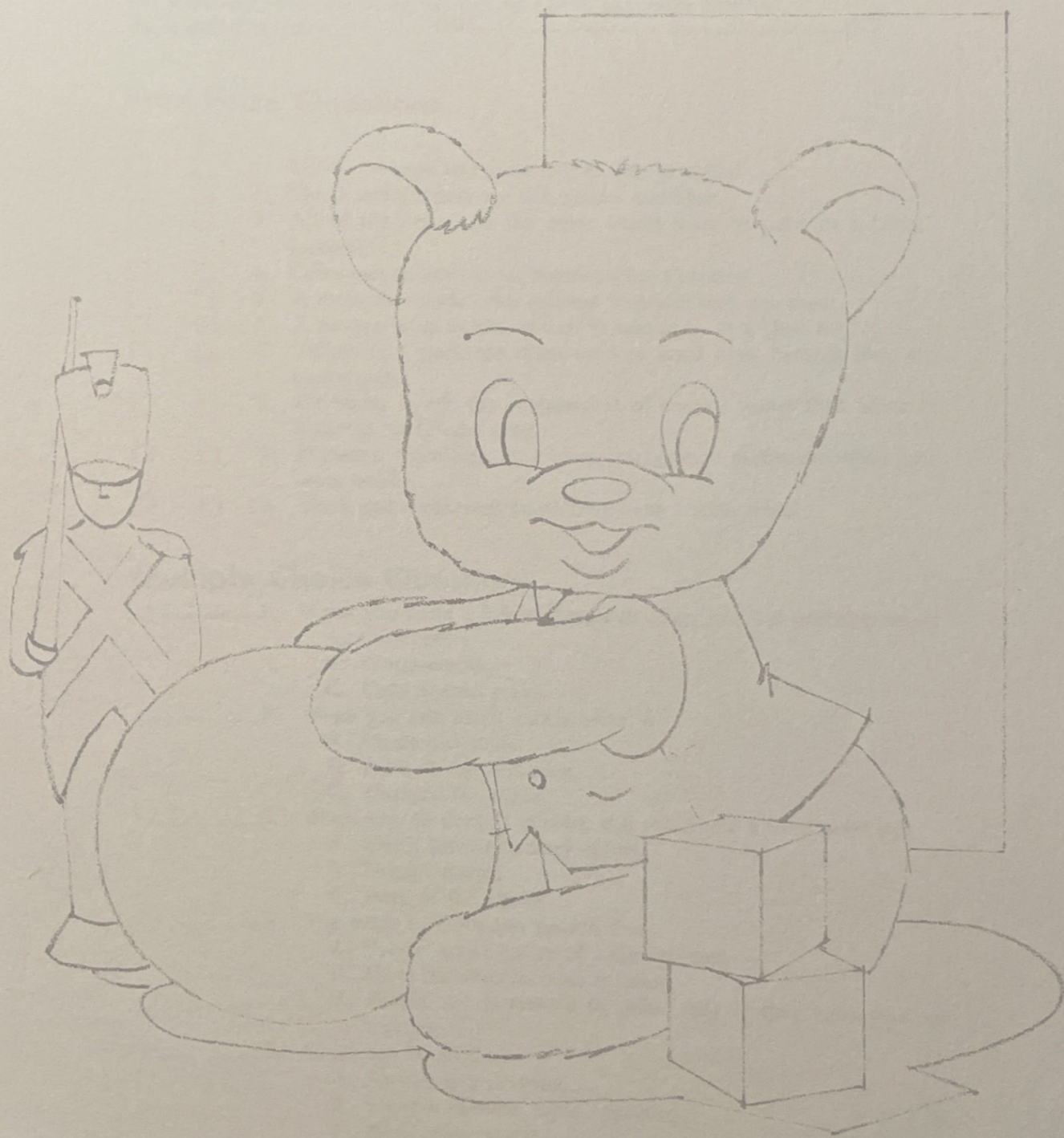
BASIC COLOR LESSON ASSIGNMENT

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____



BASIC COLOR LESSON ASSIGNMENT

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____

BASIC COLOR TEST

Directions: Study each question before choosing the correct answer. For the True-False questions, put an X in the box under "T" if you think statement is correct or True. If you think the statement is wrong or False, put an X in the box under the "F".

For the Multiple Choice questions, read the first part of the item to decide what the question is trying to test. Do NOT mark the answer until you have read *all* of the answers. Then, choose the answer which you think best answers the question or completes the sentence. Write the letter for this answer in the space next to the question number.

True-False Questions

- | T | F | |
|--------------------------|--------------------------|---|
| ☐ | ☐ | 1. Yellow, orange and violet are analogous colors. |
| ☐ | ☐ | 2. The primary colors are red, yellow and blue. |
| ☐ | ☐ | 3. All of the colors on the color wheel must be used in a "cool" picture. |
| ☐ | ☐ | 4. Color can be used to set the mood for a picture. |
| ☐ | ☐ | 5. A monochromatic color scheme basically uses one color. |
| ☐ | ☐ | 6. A picture done mostly in tints is said to be in a "low key". |
| ☐ | ☐ | 7. Yellow and black are often used on road signs because they are easily seen. |
| ☐ | ☐ | 8. It's better to use the complement of a color rather than black in order to "gray" the color. |
| ☐ | ☐ | 9. Placing a white area on a black background makes the white area seem smaller. |
| ☐ | ☐ | 10. Black and white must be used to make a color wheel. |

Multiple Choice Questions

- _____ 1. When you paint a fall landscape in color, you will probably want:
A. Cool colors.
B. Warm colors.
C. Only neutral grays.
- _____ 2. When you mix black with a color, it:
A. Mixes unevenly.
B. Adds to the brilliance.
C. Darkens the value.
- _____ 3. When you do designs in color you can create a focal point by:
A. Using complementary colors.
B. Using contrast.
C. Both of the above.
- _____ 4. The study of color has proven that:
A. People aren't aware of color changes.
B. Have definite reactions to color.
C. People are interested in color only if they have had art training.
- _____ 5. Color can be used to:
A. Spruce up a drawing.
B. Make a drawing more appealing.
C. Both of the above.

Send your Color Practice sheet, the Basic Color Lesson Assignment and this test to the school together.

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____